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**NEW GENERA AND SPECIES OF COCCINELLIDAE FROM THE
WESTERN UNITED STATES
(COLEOPTERA)**

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ABSTRACT—Two new genera and three new species are described: *Gnathoweisca schwarzi* from Arizona; *Blaisdelliana vanduzeei* from Utah; *Selvadius nunenmacheri* from Colorado and Wyoming. Keys are provided for the species and male genitalia and other pertinent structures illustrated.

In the course of working with the U. S. National Museum collection new genera and species of Coccinellidae were found. This material along with additional specimens from the California Academy of Sciences and Museum of Comparative Zoology is described below. The genus *Microweisca* Cockerell (Sticholotini) in North America appears

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to be heterogenous and may be split into still more genera when a comprehensive study of the genus is completed.

Blaisdelliana, n. gen.

Form narrow, parallel-sided. Head slightly inclined downward, not vertical; eyes small and widely separated, completely exposed; clypeus nearly parallel-sided (fig. 1); antennae inserted under clypeal margin immediately anterior to eyes, not extending past the posterior margin of eye, 11-segmented, club 3-segmented, compact, last segment small, tightly jointed to penultimate (fig. 8); maxillary palpi large, 4-segmented, securiform, received in grooves on underside of head; labial palpi 3-segmented; mandibles bifid at apex. Pronotum with base very slightly wider than apex, lateral margins slightly curved, anterior margin nearly straight, anterior angles slightly produced forward. Elytra with lateral margins straight, apex nearly truncate, sutural angles rounded. Epipleura narrow, flat. Prosternal process narrow, tip bluntly rounded, carinae lacking (fig. 3). Legs long, slender; anterior femora flattened slightly for reception of tibiae; tarsal claws simple, not toothed. Abdomen with 6 visible sterna, first segment $1\frac{1}{2}$ times as wide as second, sterna 2 through 6 subequal in width; postcoxal lines incomplete, extending $\frac{3}{4}$ the distance to the posterior margin of the first abdominal sternum and laterally slightly more than $\frac{2}{3}$ the distance to the lateral margin, curved upward apically (fig. 29).

Type-species, *Blaisdelliana vanduzeei*, n. sp.

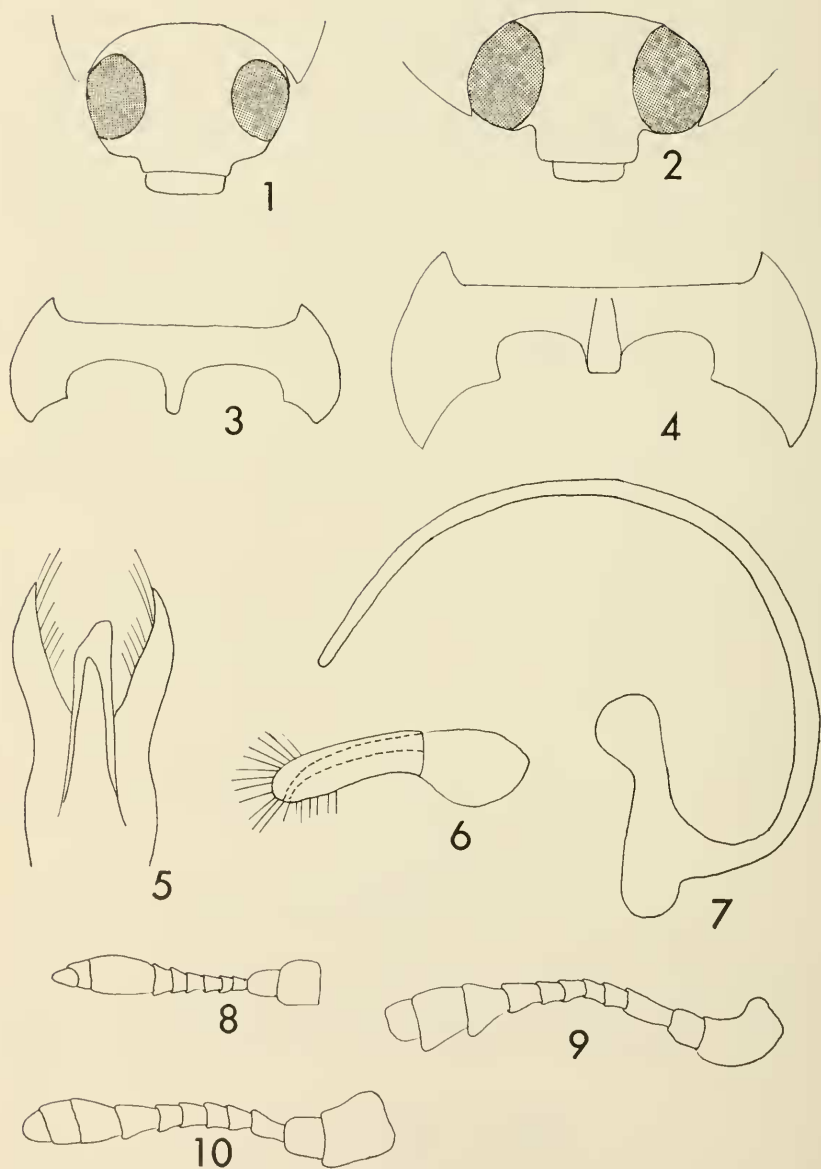
Blaisdelliana belongs to the Scymnini and most nearly resembles *Selvadius* Casey from which it may be separated by the antennae (figs. 8, 10), prosternum (figs. 3, 4), and the postcoxal lines (figs. 29, 30). In addition, *Blaisdelliana* has the dorsal pubescence nearly absent while it is quite obvious in *Selvadius*. Both *Selvadius* and *Blaisdelliana* are separated from *Scymnus* Kugelann by the form of the head, pronotum and antennae. *Scymnus* has the eyes partially covered by the pronotum (fig. 2), and the antennae have the club segments uneven on the ventral margin (fig. 9).

I am indebted to Hugh Leech of the California Academy of Sciences for loan of part of the material reported here. Included in this loan were specimens from the Nunenmacher collection which bore Nunenmacher's manuscript name "*Blaisdelliana vanduzeei*." These specimens were indeed a new genus and species and are described using the proposed manuscript name. I am also indebted to John Lawrence of the Museum of Comparative Zoology for the loan of the type of *Scymnus megacephalus* Fall.

Blaisdelliana vanduzeei, n. sp.

(Figs. 1, 3, 5, 6, 7, 8, 29)

Holotype male.—Length 1.36 mm., width 0.87 mm. Elongate, parallel-sided. Piceous brown, clypeus, underside of head, apex of femora, tibiae and tarsi yellow. Pubescence short, sparse. Head alutaceous, punctured, punctures separated by 2 to 3 times their diameter. Pronotum shining, punctured, punctures larger than on head, separated by less than twice their diameter. Elytra faintly alutaceous,



Figs. 1, 3, 5-8, *Blaisdelliana vanduzeei*, n. sp.: 1, head; 3, prosternum; 5-7, ♂ genitalia; 5, phallobase, ventral, 6, phallobase, lateral, 7, siphon, lateral; 8, antenna. Figs. 2, 4, 9, *Scymnus* sp.: 2, head; 4, prosternum; 9, antenna. Fig. 10, *Selvadius nunenmacheri*, n. sp.; antenna.

punctured, punctures much larger than on pronotum, separated by the diameter of a puncture. Metasternum alutaceous, faintly punctured. First abdominal sterna finely and sparsely punctured, second through sixth sterna slightly more coarsely and densely punctured. Male genitalia with basal lobe rectangular at tip, slightly bent to one side (figs. 5, 6); siphon evenly rounded, with shoe-like basal process and truncate tip (fig. 7).

Female.—Similar to male except clypeus piceous brown and abdomen slightly broader.

Holotype.—Utah; St. George, July, Wickham.

Paratype.—Same data as holotype. Both types deposited in California Academy of Sciences.

Selvadius Casey

Selvadius Casey, 1899, pp. 137–138. Type-species, *Selvadius rectus* Casey, monotypic.

One species is transferred to this genus and one new species described to bring the total known *Selvadius* to three species.

KEY TO SPECIES OF *Selvadius*

1. Length 1.60 mm. or less; prosternal carinae widely separated, diverging slightly anteriorly ***Selvadius rectus* Casey**
 Length 1.80 mm. or more; prosternal carinae narrowly separated, converging anteriorly (fig. 4) 2
2. Average length 2.10 mm.; width 1.40 mm. or more; form robust
 ***Selvadius megacephalus* (Fall)**
 Average length 1.89 mm.; width less than 1.40 mm; form elongate, parallel-sided ***Selvadius nunenmacheri*, n. sp.**

***Selvadius megacephalus* (Fall), n. comb.**

(Figs. 17, 18)

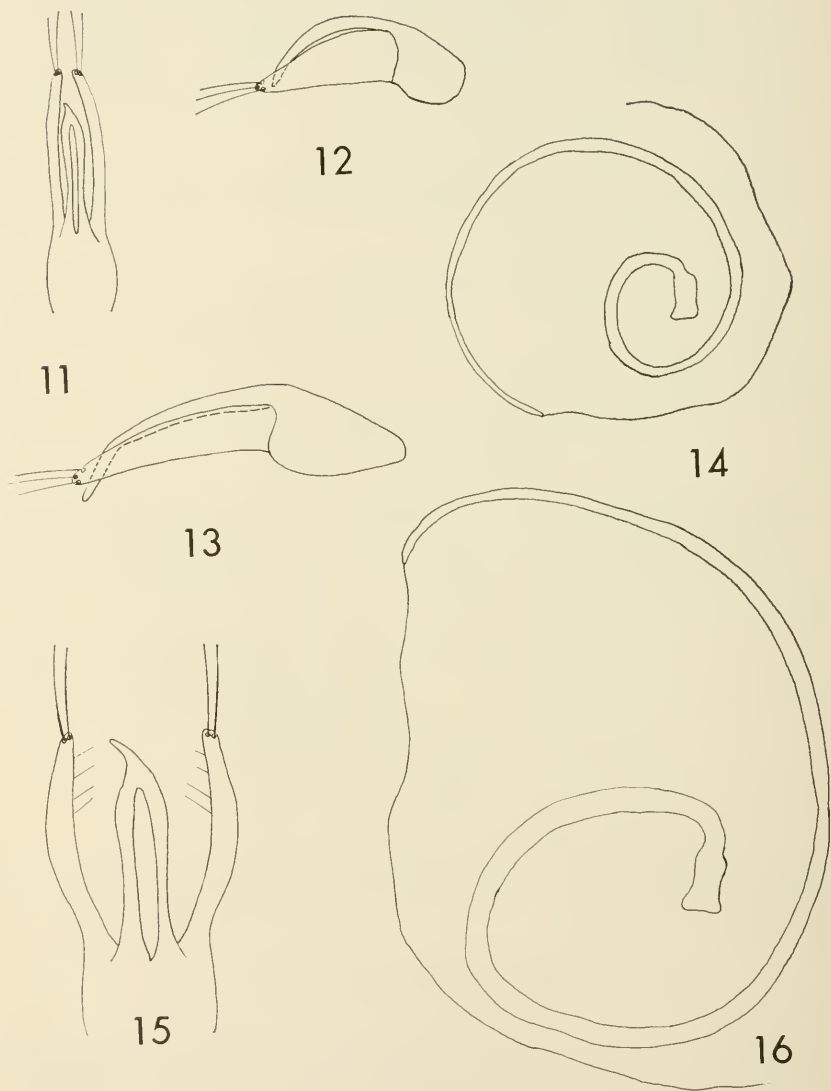
Scymnus megacephalus Fall, 1901, p. 233.

This species was described from southern California and I have seen specimens from Arizona and New Mexico. See key to species of *Selvadius* for characters.

***Selvadius nunenmacheri*, n. sp.**

(Figs. 4, 10, 13, 15, 16, 30)

Holotype male.—Length 1.90 mm., width 1.10 mm. Form narrowly oblong. Piceous brown, mouthparts, antennae, and legs yellowish brown. Pubescence short, dense, decumbent. Head slightly inclined downward, not vertical, slightly alutaceous, punctured, punctures separated by 1 to 2 times their diameter, eyes small and widely separated, completely exposed, clypeus short, parallel-sided; antennae inserted under clypeal margin immediately anterior to eyes, flattened dorso-ventrally, 11-segmented, club 3-segmented (fig. 10); maxillary palpi large, 4-segmented, securiform, received in grooves on underside of head; labial palpi



Figs. 11, 12, 14, *Selvadius rectus* Casey, ♂ genitalia: 11, phallobase, ventral; 12, phallobase, lateral; 14, siphus, lateral. Figs. 13, 15, 16, *S. nunenmacheri*, n. sp., ♂ genitalia: 13, phallobase, lateral; 15, phallobase, ventral; 16, siphus, lateral.

3-segmented; mandibles bifid at apex. Pronotum with sides parallel and straight, rounding and slightly convergent at anterior angles, slightly alutaceous, punctures equal in size to those of head, separated by 1 to 2 times their diameter. Elytra slightly alutaceous, densely and coarsely punctured, punctures contiguous or separated by less than their diameter. Prosternal process broad, tip rectangular, two carinae present, converging apically (fig. 4). Tarsal claws with small median tooth. Postcoxal lines incomplete, extending $\frac{3}{4}$ of the distance to the posterior margin of first abdominal sternum and laterally a little more than $\frac{1}{2}$ the distance to the lateral margin, not curved upward apically (fig. 30). Male genitalia with parameres flat, bluntly pointed apically; basal lobe asymmetrical, tip rounded and bent to one side (figs. 13, 15); siphon very long with a slender filament at apex (fig. 16).

Female.—Similar to male in all external aspects.

Variation.—Length ranges from 1.85 to 2.15 mm., width from 1.10 to 1.38 mm. in the type series.

Holotype.—Colorado: Colorado Springs, 10-10, Collection H. Soltau (U. S. Nat. Mus. type no. 70401).

Paratypes.—6, Colorado: Colorado Springs, 10-10, Coll. Hubbard & Schwarz; Colorado Springs, 4-4, Collection H. Soltau; 3-4, Coll. Hubbard & Schwarz. Wyoming: Cheyenne, 22-4, Collection H. Soltau; Tipton, 12-6, Coll. Hubbard & Schwarz.

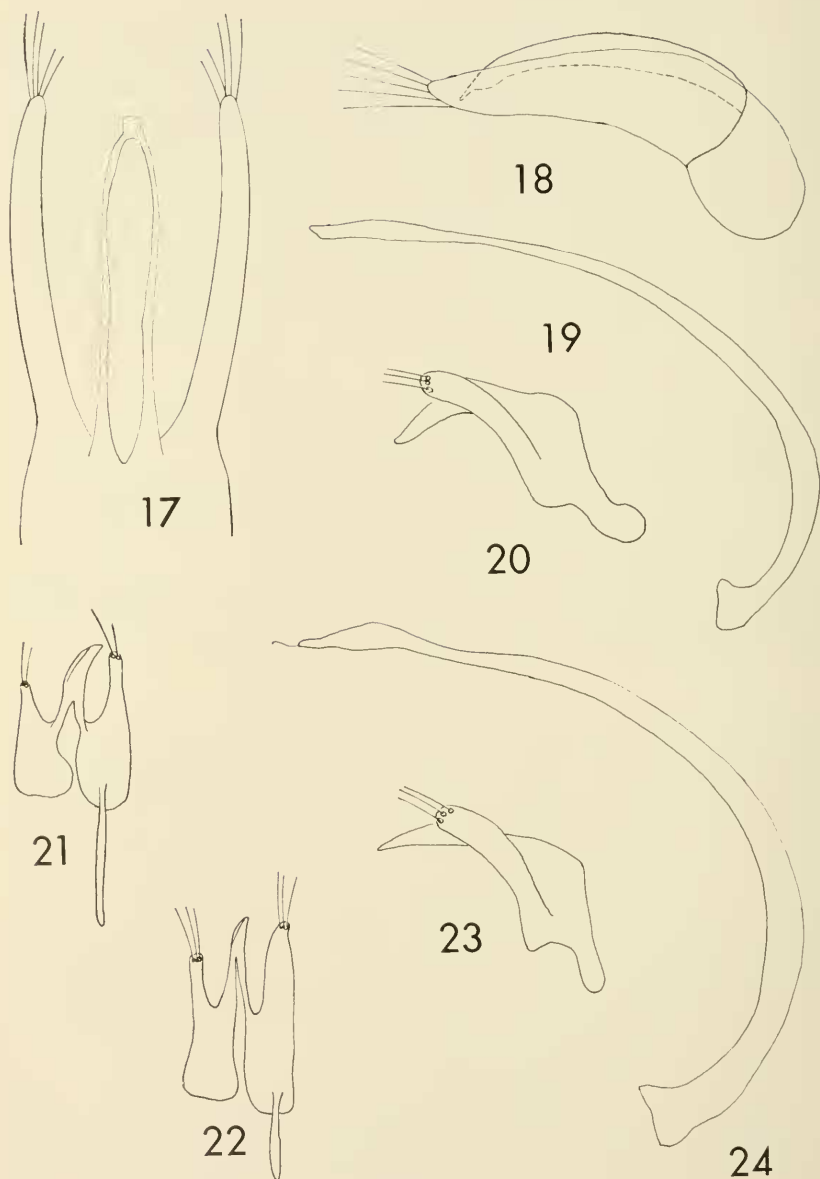
The male genitalia of *Selvadius numenmacheri*, n. sp., are distinct from those of *Selvadius rectus* Casey (figs. 11, 12, 14), and *Selvadius megacephalus* (Fall) (figs. 17, 18).

Gnathowisea, n. gen.

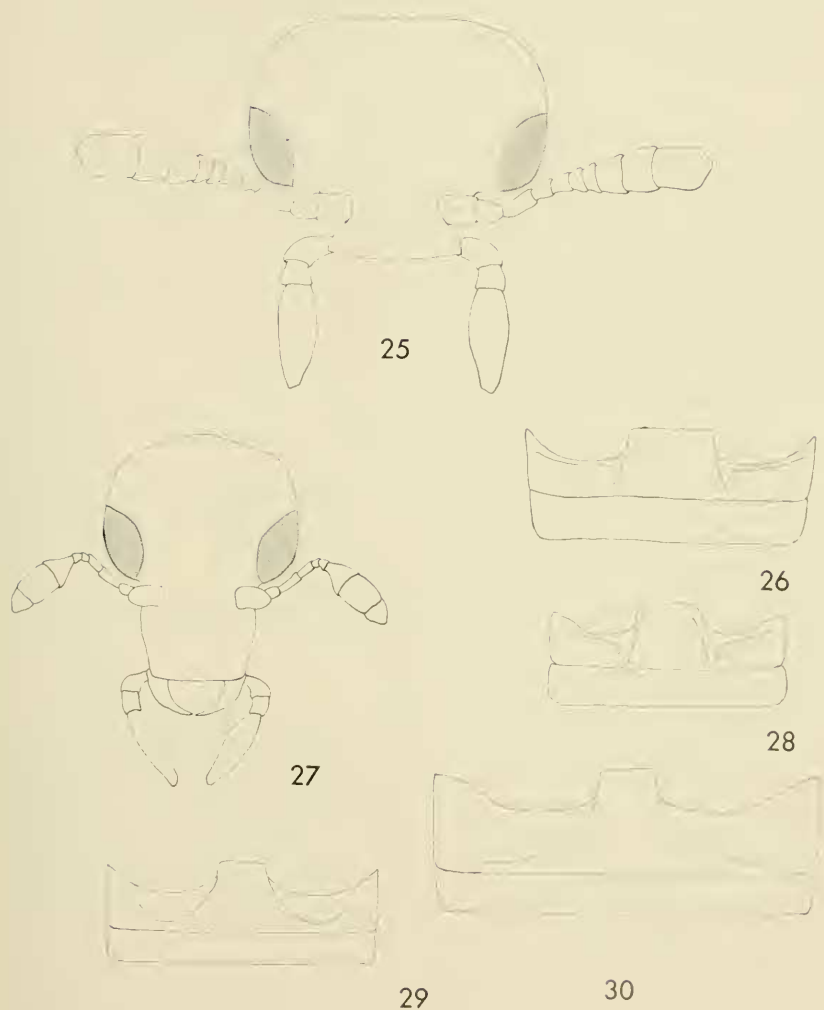
Form elongate-oval. Head prolonged anteriorly; clypeus narrow, parallel-sided, emarginate anterior to eyes for antennal insertion; antennae 9-segmented, 3-segmented club compact, ultimate segment tapering to a point (fig. 27); maxillary palpi 4-segmented, last segment cylindrical; labial palpi 2-segmented; mandibles bifid at apex. Pronotum partially covering head, wider basally, anterior angles rounded, lateral margins rounded to base. Each elytron with a sutural stria present. Epipleura narrow, flat. Prosternal process narrow, apex rectangular. Legs long, slender, anterior femora faintly grooved for reception of tibiae; tarsal claws with a blunt projection basally. Abdomen with 6 visible abdominal sterna, first sternum slightly larger than others. Postcoxal lines incomplete, one part extending from base of coxal cavity nearly to posterior margin of first abdominal sternum, second part extending parallel to coxal cavity nearly to lateral margin of sternum (fig. 28).

Type-species, *Smilia planiceps* Casey.

Gnathowisea and *Microwisea* are the only two genera of the Stichelotini thus far recorded from North America. *Microwisea* does not have the head extremely prolonged anteriorly and the antennae are 10-segmented with a large 3-segmented club (fig. 25). *Gnathowisea* has the head prolonged and the 9-segmented antennae have small, compact, 3-segmented clubs (fig. 27). *Microwisea* has the lateral portion of the postcoxal line nearly straight (fig. 26). *Gnathowisea* has the lateral portion of the prosternal line curved downward (fig. 28).



Figs. 17, 18, *Selvadius megacephalus* (Fall), ♂ genitalia: 17, phallobase, ventral; 18, phallobase, lateral. Figs. 19-21, *Gnathoweisea schwarzi*, n. sp., ♂ genitalia: 19, siphus, lateral; 20, phallobase, lateral; 21, phallobase, ventral. Figs. 22-24, *G. planiceps* Casey, ♂ genitalia: 22, phallobase, ventral; 23, phallobase, lateral; 24, siphus, lateral.



Figs. 25, 26, *Microweisea misella* (LeC.): 25, head, antennae, maxillary palpi; 26, first and second abdominal sternites, postcoxal lines. Figs. 27, 28, *Gnathoweisea schwarzi*, n. sp.: 27, head, antennae, maxillary palpi; 28, first and second abdominal sternites, postcoxal lines. Fig. 29, *Blaisdelliana vanduzeci*, n. sp.; first and second abdominal sternites and postcoxal lines. Fig. 30, *Selvadius nunenmacheri*, n. sp.; first and second abdominal sternites and postcoxal lines.

KEY TO SPECIES OF *Gnathowisea*

- Pronotum without an oblique line across the anterior angles; head extremely narrow and prolonged anteriorly *Gnathowisea schwarzi*, n. sp.
 Pronotum with an oblique line across the anterior angles; head shorter, not as narrow as in *schwarzi* *Gnathowisea planiceps* (Casey)

Gnathowisea schwarzi, n. sp.

(Figs. 19, 20, 21, 27, 28)

Holotype male.—Length 1.00 mm., width 0.70 mm. Brown, pronotum piceous brown. Head alutaceous, impunctate. Pronotum strongly alutaceous, impunctate, lacking oblique line across anterior pronotal angle. Elytra faintly alutaceous, punctured, punctures separated by 2 to 3 times their diameter. Underside strongly alutaceous, impunctate. Male genitalia with one paramere longer than the other; basal lobe bent to one side, curved downward in lateral view (figs. 20, 21), siphon with apex nearly truncate (fig. 19).

Female.—Similar to male in all external aspects.

Variation.—Length ranges from 0.98 mm. to 1.03 mm. and width from 0.70 to 0.75 mm. in the type series.

Holotype.—Arizona: Williams, 20-7, Barber & Schwarz Coll. (U. S. Nat. Mus. type no. 70406).

Paratypes.—29, Arizona: Williams, 1-7, 22-7, 20-7, Barber & Schwarz Coll., U. S. Nat. Mus., 1, Benson, Cochise Co., X-4-06, collected by F. W. Nunenmacher, California Academy of Sciences.

Gnathowisea planiceps (Casey), n. comb.

(Figs. 22, 23, 24)

Smilia planiceps Casey, 1899, p. 135.

Microwisea planiceps: Cockerell, 1903, p. 38.

Male.—Length 1.08 mm., width 0.80 mm. Color piceous brown. Head alutaceous, impunctate. Pronotum strongly alutaceous, impunctate, oblique line present across anterior pronotal angle. Elytra faintly alutaceous, punctured, punctures separated by 2 to 3 times their diameter. Underside strongly alutaceous, impunctate. Male genitalia with one paramere longer than the other; basal lobe nearly straight in ventral view, curved downward in lateral view (figs. 22, 23); siphon with a bulbous thickened area just before apex (fig. 24).

Female.—Similar to male in all external aspects.

Distribution.—California.

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